

# **General Permit for Construction of Intake and Outfall Structures**

Effective Date: July 1, 2005

Expiration Date: June 30, 2010

This general permit authorizes the construction, maintenance, repair, rehabilitation or replacement of intake and outfall structures in waters of the state. Authorization under this general permit is **only for the construction of the structures** and does not authorize the water withdrawal or release. Outfall structures include those structures and conveyances used for the discharge of wastewater, storm-water, cooling water, etc. Intake structures include those structures used for the removal of water for the purpose of domestic water supply, irrigation, cooling water, etc. The effluent from the outfall must be separately authorized, conditionally authorized, specifically exempted, or otherwise in compliance with regulations issued under the National Pollutant Discharge Elimination System program (§402 of *The Clean Water Act*). The withdrawal of water by the intake must be separately authorized, specifically exempted, or otherwise in compliance with regulations issued under §69-3-108 of *The Tennessee Water Quality Control Act of 1977*.

Failure to comply with the terms and conditions of this permit is a violation of the *Tennessee Water Quality Control Act of 1977* and is subject to penalty in accordance with T.C.A. §69-3-115.

## **Exclusions**

This general permit shall not be used to authorize activities in the following circumstances:

- 1) where the proposed activity may adversely affect wetlands;
- 2) where a portion of the proposed activity is located in a component of the National Wild and Scenic River System, a State Scenic River, waters designated as Outstanding National Resource Waters;
- 3) where a portion of the proposed activity is located in any waterway which is identified by the department as having contaminated sediments, and where the activity will likely mobilize the contaminated sediments;
- 4) when the proposed activity will adversely affect a species formally listed on either state or federal lists of threatened or endangered species or their critical habitat;
- 5) when the department determines that the proposed activities, either individually or cumulatively, may result in degradation to waters of the state; or
- 6) when an individual permit is otherwise required.

Projects not qualifying for authorization under this general permit, may be authorized by an individual permit, provided that all requirements of the *Tennessee Water Quality Control Act of 1977* are met.

## **Notification**

Applicants proposing the construction, maintenance, repair, rehabilitation or replacement of intake and outfall structures under this general permit must notify the division by submission of an original, signed application (form CN-1091) along with the following minimum information:

- (a) a cover letter explaining the scope of the project;
- (b) a USGS topographical map showing the exact location of the proposed project;
- (c) a single copy of construction plans and drawings which include all dimensions and specifications for the proposed work, as well as pollution control methods and/or structures.

Work shall not commence until the applicant has received written authorization from the division that the activities may proceed under this general permit or that an individual permit has been issued.

All activities covered under this general permit must comply with all terms and conditions contained hereinafter.

## **Terms and Conditions**

- 1) The work shall be accomplished in conformance with the accepted plans, specifications, data and other information submitted in support of the above mentioned application and the limitations, requirements, and conditions set forth herein.

- 2) Applicant is responsible for obtaining the necessary authorization pursuant to applicable provisions of §10 of *The Rivers and Harbors Act of 1899*; §404 of *The Clean Water Act* and §26a of *The Tennessee Valley Authority Act*, as well as any other federal, state or local laws.
- 3) Applicant is responsible for obtaining coverage under the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges from Construction Activities for construction sites involving clearing, grading or excavation that result in an area of disturbance of one or more acres, and activities that result in the disturbance of less than one acre if it is part of a larger common plan of development or sale.
- 4) Where practicable and otherwise in accordance with 4)a. and 4)b. below, excavation and backfill activities shall be accomplished in the dry. All surface water flowing towards this work shall be diverted through utilization of cofferdams and/or berms. Cofferdams and berms must be constructed of sandbags, clean rock, steel sheeting, or other non-erodible material. Clean rock is rock of various type and size, depending upon application, that contains no fines, soils, or other wastes or contaminants.
  - a. The excavation and fill activities associated with construction of intake and outfall structures on non-navigable streams as defined by §10 of the *Rivers and Harbors Act of 1899*, shall be accomplished in the dry.
  - b. The excavation and fill activities associated with construction of intake and outfall structures of navigable streams as defined by §10 of the *Rivers and Harbors Act of 1899*, where impracticable to work in the dry, the work may otherwise be accomplished within the water column.
- 5) New intake or outfall structures shall be located and oriented such as to avoid permanent alteration or damage to the integrity of the stream channel including the opposite stream bank. The alignment of the outfall structure (except for diffusers) should be as parallel to the stream flow as is practicable, with the discharge pointed downstream. Diffusers may be placed perpendicular to stream flow for more complex mixing.
- 6) Intake and outfall structures shall be designed to minimize harm and to prevent the impoundment of normal or base flows. Base flow is the usual or normal flow of the stream that is supplied primarily by groundwater from springs and seeps, but not affected by rapid runoff during and after rainfall.
- 7) Velocity dissipation devices shall be placed as needed at discharge locations to provide a non-erosive velocity from the structure.
- 8) The activity may not be conducted in a manner that would permanently disrupt the movement of fish and aquatic life.
- 9) Material may not be placed in a location or manner so as to impair surface water flow into or out of any wetland area.
- 10) Backfill activities must be accomplished in a manner that stabilizes the streambed and banks to prevent erosion. All contours must be returned to pre-project conditions to the extent practicable and the completed activities may not disrupt or impound stream flow.
- 11) Checkdams shall be utilized where runoff is concentrated. Clean rock, log, sandbag or straw bale checkdams shall be properly constructed to detain runoff and trap sediment. Checkdams or other erosion control devices are not to be constructed in stream. Clean rock can be of various type and size, depending on the application. Clean rock shall not contain fines, soils or other wastes or contaminants.
- 12) Muddy water to be pumped from excavation and work areas must be held in settling basins or filtered prior to its discharge into surface waters. Settling basins shall not be located closer than 20 feet from the top bank of the stream and water must be discharged through a pipe, well grassed or lined channel or other equivalent means so that the discharge does not cause erosion and sedimentation.
- 13) Stream beds shall not be used as transportation routes for construction equipment. Temporary stream crossings shall be limited to one point in the construction area and erosion control measures shall be utilized where stream banks are disturbed. Stream crossings should be constructed of clean rock and stream flow should be conveyed in appropriately sized pipe. The crossing shall be constructed so that stream flow is not obstructed. Following construction, all materials used for the temporary crossing shall be removed and disturbed stream banks shall be restored and stabilized if needed.
- 14) Materials used in intake and outfall structures or projects must be free of contaminants, including toxic pollutants, hazardous substances, waste metal, construction debris and other wastes as defined by T.C.A. 69-3-103(18).
- 15) Clearing, grubbing and other disturbance to the riparian vegetation shall be kept at the minimum necessary for slope construction and equipment operations. Unnecessary riparian vegetation removal, including trees, is prohibited.

- 16) Sediment must be prevented from entering waters of the state. Erosion and sediment controls shall be designed according to the size and slope of disturbed or drainage areas to detain runoff and trap sediment and must be properly selected, installed, and maintained in accordance with the manufacturer's specifications and good engineering practices.
- 17) Erosion and sediment control measures must be in place and functional before earth moving operations begin, and must be constructed and maintained throughout the construction period. Temporary measures may be removed at the beginning of the work day, but must be replaced at the end of the work day.
- 18) Sediment should be removed from sediment traps, silt fences, sedimentation ponds, and other sediment controls as necessary, and must be removed when design capacity has been reduced by 50%. Discharges from sediment basins and traps must be through a pipe or lined or well-grassed channel so that the discharge does not cause erosion.
- 19) Litter, construction debris, and construction chemicals exposed to storm water shall be picked up prior to anticipated storm events (e.g. forecasted by local weather reports), or otherwise prevented from becoming a pollutant source for storm water discharges (e.g., screening outfalls, daily pick-up, etc.). After use, silt fences should be removed or otherwise prevented from becoming a pollutant source for storm water discharges.
- 20) Pre-construction vegetative ground cover shall not be destroyed, removed or disturbed more than 10 calendar days prior to grading or earth moving unless the area is seeded and/or mulched or other temporary cover is installed.
- 21) Excavated materials, removed vegetation, construction debris, and other wastes shall be removed to an upland location and properly stabilized or disposed of in such a manner as to prevent reentry into the waterway.
- 22) Stabilization measures must be initiated within seven days after the construction activity has temporarily or permanently ceased.
- 23) Temporary or permanent soil stabilization shall be accomplished within 15 days after final grading or other earth work. Permanent stabilization with perennial vegetation (using native herbaceous and woody plants where practicable) or other permanently stable, non-eroding surface shall replace any temporary measures as soon as practicable.
- 24) Appropriate steps shall be taken to ensure that petroleum products or other chemical pollutants are prevented from entering waters of the state. All spills must be reported to the appropriate emergency management agency and to the division. In the event of a spill, measures must be taken immediately to prevent pollution of waters of the state, including groundwater.
- 25) This general permit does not authorize impacts to cultural, historical or archaeological features or sites.
- 26) The division will establish an expiration date for coverage under this general permit that is specific to the authorization and separate from the general permit expiration date.

APPROVED:   
Paul E. Davis, Director, Water Pollution Control

DATE: 6-30-05